



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/607,560

06/27/2003

Doo-Hwan Jo

P-0401

7285

34610

7590

02/28/2006

FLESHNER & KIM, LLP

P.O. BOX 221200

CHANTILLY, VA 20153

EXAMINER

YUN, EUGENE

ART UNIT

PAPER NUMBER

2682

DATE MAILED: 02/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/607,560	<b>Applicant(s)</b> JO, DOO-HWAN	
	<b>Examiner</b> Eugene Yun	<b>Art Unit</b> 2682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Kjeldsen (EP 0364935).

Referring to Claim 1, Kjeldsen teaches an electronic device, comprising:

a sound generator (see col. 2, lines 35-37);

a housing having a plurality of holes (see col. 2, lines 39-41); and

a sound controller between the sound generator and housing (see col. 2, lines 38-41),

wherein the sound controller controls discharge of sound from the sound generator through the holes in the housing (see col. 2, lines 41-48).

Referring to Claim 16, Kjeldsen teaches a communications terminal comprising:

A housing (see col. 2, lines 39-41);

A receiver within the housing (see col. 2, lines 35-37);

A sound controller between the receiver and housing (see col. 2, lines 38-41);

Wherein the sound controller controls discharge of sound from the receiver through holes in the housing (see col. 2, lines 41-48).

Referring to Claim 29, Kjeldsen teaches a method for controlling sound in a communications terminal, comprising:

Generating sound (see col. 2, lines 35-37);

Controlling discharge of the sound through holes in a housing of the terminal (see col. 2, lines 41-48).

Referring to Claim 35, Kjeldsen teaches a receiver unit of a terminal device comprising:

A main body consisting of an outer case 2 (fig. 1) forming an outer portion and an inner case 7 (fig. 1) coupled with the outer case and having a plurality of sound discharge holes (see col. 2, lines 38-41);

A receiver disposed inside the main body and generating a sound (see col. 2, lines 35-37); and

A sound leakage unit disposed between the receiver and the inner case and leaking a portion of the sound generated from the receiver before being discharged through the sound discharge hole (see col. 2, lines 41-48).

Referring to Claims 2, 17, and 30, Kjeldsen also teaches the sound controller controlling the discharge of sound through the holes based on a predetermined sound leakage pattern (see col. 4, lines 3-7).

Referring to Claims 3, 18, and 31, Kjeldsen also teaches the predetermined sound leakage pattern increasing uniformity of output sound volume within a predetermined distance range from the device (see col. 4, lines 8-18).

Referring to Claims 4 and 19, Kjeldsen also teaches the sound controller including a leakage member having a plurality of holes (fig. 3),

Wherein a portion of the holes in the leakage member are aligned with the holes in the housing and wherein other holes in the housing are blocked by the leakage member (see col. 3, lines 19-30).

Referring to Claims 5 and 20, Kjeldsen also teaches the holes in the leakage member arranged relative to the holes in the housing to leak sound in a circumferential direction (see fig. 3 and col. 3, lines 9-18).

Referring to Claims 6 and 21, Kjeldsen also teaches the holes in the leakage member arranged at regular intervals in a circumferential direction (see fig. 3 and col. 3, lines 9-18).

Referring to Claims 7 and 22, Kjeldsen also teaches the leakage member cylindrical in shape and wherein the holes in the leakage member are in a circumferential direction (see fig. 3 and col. 3, lines 9-18).

Referring to Claims 8 and 23, Kjeldsen also teaches the holes in the housing and the holes in the leakage member arranged in a same pattern (see col. 3, lines 19-30).

Referring to Claims 9 and 24, Kjeldsen also teaches said pattern as a circular pattern (see col. 3, lines 19-30).

Referring to Claims 10 and 25, Kjeldsen also teaches a spacing between the sound generator and housing corresponds to a thickness of the leakage member (see col. 4, lines 8-18).

Referring to Claims 11 and 26, Kjeldsen also teaches the sound generator including at least one spacing member which controls a spacing between the sound generator and housing (see col. 3, lines 50-55).

Referring to Claims 12 and 27, Kjeldsen also teaches the sound generator including a wall having a plurality of holes (see fig. 2).

Referring to Claims 13 and 28, Kjeldsen also teaches the holes in said wall are coincident with the holes in the housing (see col. 3, lines 19-30).

Referring to Claim 14, Kjeldsen also teaches the electronic device as a communications terminal (see col. 2, lines 35-37).

Referring to Claim 15, Kjeldsen also teaches the communications terminal as a mobile communications terminal (see col. 2, lines 35-37).

Referring to Claim 32, Kjeldsen also teaches passing the sound only through a predetermined portion of the holes in the housing (see col. 3, lines 19-30).

Referring to Claim 33, Kjeldsen also teaches passing the sound in a circumferential direction through said predetermined portion of the holes (see fig. 3 and col. 3, lines 9-18).

Referring to Claim 34, Kjeldsen also teaches said predetermined portion of the holes are arranged at regular intervals in a circumferential direction (see fig. 3 and col. 3, lines 9-18).

Referring to Claim 36, Kjeldsen also teaches a plurality of leakage holes formed between a front side of the receiver and an inner side of the inner case in order to leak a sound therethrough in a circumferential direction (see fig. 3 and col. 3, lines 9-18).

Referring to Claim 37, Kjeldsen also teaches the sound leakage unit including leakage holes formed at regular intervals in a circumferential direction of the lower housing of the receiver, and a plurality of protrusions formed protruded with a certain width (see fig. 3 and col. 3, lines 9-18).


Referring to Claim 38, Kjeldsen also teaches the sound leakage unit of the receiver unit has a certain width and is formed as a cylindrical type with a plurality of leakage holes in a circumferential direction, and both sides of which are respectively attached at a lower housing of the receiver and the inner case (see fig. 3 and col. 3, lines 9-18).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eugene Yun whose telephone number is (571) 272-7860. The examiner can normally be reached on 9:00am-6:00pm.

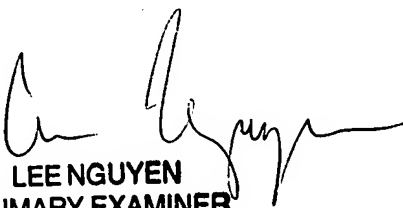
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on (571)272-7629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2682

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Eugene Yun  
Examiner  
Art Unit 2682

EY

  
LEE NGUYEN  
PRIMARY EXAMINER